## (19) World Intellectual Property Organization International Bureau





(43) International Publication Date 17 February 2005 (17.02.2005)

(10) International Publication Number WO 2005/013863 A3

- (51) International Patent Classification<sup>7</sup>: A61F 2/44, 2/30
- (21) International Application Number:

PCT/NL2004/000495

- (22) International Filing Date: 8 July 2004 (08.07.2004)
- (25) Filing Language: Dutch
- (26) Publication Language: **English**
- (30) Priority Data:

15 July 2003 (15.07.2003) 1023926

- (71) Applicant (for all designated States except US): TECH-NISCHE UNIVERSITEIT EINDHOVEN [NL/NL]; Den Dolech 2, NL-5612 AZ Eindhoven (NL).
- Den Dolech 2, NL-5612 AZ Eindhoven (NL).

  (72) Inventors; and

  (75) Inventors/Applicants (for US only): RIJKSUNIVER-STETIT, Groningen (NL). HUVGHE, Jacques, Mark, René, Jan (NL/NL): van Renesseweg 18, NL-5645 JN Eindhoven (NL). VAN DONKELAAR, Corrinus, Cornells (NL/NL): Atalantastraat 13, NL-5641 HI Eindhoven (NL). VAN DONKELAAR, Corrinus, Cornells (NL/NL): Atalantastraat 13, NL-5641 HI Eindhoven (NL). VERK-ERKE, Gijsbertus, Jacob (NL/NL): Eaclueit Medische Wetenschappen, Disciplinegroep Biomedical Engineering, Rijksuniversiteit Groningen, Postbus 196, NL-9700 AD Groningen (NL). EIJKELKAMP, Marcus, Franciscus (NL/NL): Faculteit Medische Wetenschappen, Disciplinegroep Biomedical Engineering, Rijksuniversiteit Groningen, Postbus 196, NL-9700 AD Groningen (NL). VELDHUIZEN, Albert, Gerrett (NL/NL): Academisch Ziekenhuis Groningen, Afdeling Orthopedie, Postbus 30.0001, NL-9700 RG Groningen (NL).

  VELDHUIZEN, Albert, Gerrit (NL/NL): Academisch Ziekenhuis Groningen, Afdeling Orthopedie, Postbus 30.0001, NL-9700 RG Groningen (NL).

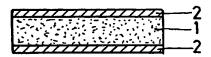
  YELDHUIZEN, Albert, Gerrit (NL/NL): Academisch Ziekenhuis Groningen, Afdeling Orthopedie, Postbus 30.0001, NL-9700 RG Groningen (NL).

  YELDHUIZEN, Albert, Gerrit (NL/NL): Academisch Ziekenhuis Groningen, Postbus 196, NL-9700 AD Groningen (NL).

  YELDHUIZEN, Albert, Gerrit (NL/NL): Academisch Ziekenhuis Groningen, Afdeling Orthopedie, Postbus 30.0001, NL-9700 RG Groningen (NL).

  YELDHUIZEN: Albert Gerrit (NL/NL): Academisch Ziekenhuis Gerrit (NL/NL): Academisch Ziekenhuis Gerrit (NL/NL

- (74) Agents: DOHMEN, Johannes, Maria, Gerardus et al.; Algemeen Octrooi- en Merkenbureau, P.O. Box 645, NL-5600 AP Bindhoven (NL).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,



of a fibre-reinforced hydrogel, which prosthesis is intended to replace cartilaginous materials. The application further relates to the use of the prosthesis and to a method for manufacturing the prosthesis. The application furthermore relates to a method of preparing the flexible portion for a prosthesis. Finally, the application relates to a fibre material apparently intended for use in the prosthesis.

